

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Withdrawn) A connection verifiable information processing system comprising:

first transmit request means of outputting a first transmit request to request an output of connection information;

information processing means of processing at least response information for said first transmit request output by said first transmit request means, said response information being described following a first format;

second transmit request means of outputting a second transmit request to request an output of connection information;

connection information outputting means of outputting response information described following a second format in response to said second transmit request when said second transmit request output by said second transmit request means is input, while remaining unresponsive to said first transmit request output by said first transmit request means;

response information receiving means of receiving the response information described following said second format output from said connection information outputting means; and

converting means of converting the response information described following said second format received by said response information receiving means into response information described following said first format that said information processing means can process, and wherein:

said information processing means processes not only the response information described following said first format returned in response to said first

transmit request output from said first transmit request means, but also the response information described following said first format into which the response information described following said second format has been converted by said converting means.

2. (Withdrawn) A connection verifiable information processing apparatus comprising:

first transmit request means of outputting a first transmit request to request an output of connection information;

information processing means of processing at least response information for said first transmit request output by said first transmit request means, said response information being described following a first format;

second transmit request means of outputting a second transmit request to request an output of connection information;

response information receiving means of receiving response information described following a second format that a connection information output device outputs in response to said second transmit request output by said second transmit request means, while remaining unresponsive to said first transmit request output by said first transmit request means; and

converting means of converting the response information described following said second format received by said response information receiving means into response information described following said first format that said information processing means can process, and wherein:

said information processing means processes not only the response information described following said first format returned in response to said first transmit request output from said first transmit request means, but also the response information described following said first format into which the response information of said second format has been converted by said converting means.

3. (Withdrawn) A connection verifiable information processing apparatus according to claim 2, further comprising judging means of judging whether said response information described following said second format is received or not by said response information receiving means, and wherein

said information processing means also processes the result of the judgement made by said judging means.

4. (Withdrawn) A connection verifiable information processing apparatus according to claim 2 or 3, wherein said second transmit request means outputs said second transmit request at regular intervals, and

said response information receiving means receives response information for said second format to said second transmit request that said second transmit request means outputs at regular intervals, said response information being described following said second format.

5. (Withdrawn) A connection verifiable information processing apparatus according to claim 2 or 3, wherein said second transmit request means outputs said second transmit request at irregular intervals, and

said response information receiving means receives response information for said second format to said second transmit request that said second transmit request means outputs at irregular intervals, said response information being described following said second format.

6. (Withdrawn) A connection verifiable information processing apparatus according to any one of claims 2 or 3, wherein the response information described following said second format that said connection information output device outputs contains an identifier for said connection information output device.

7. (Withdrawn) A connection verifiable information processing apparatus according to claim 6, wherein said identifier contains type identifying information for identifying the type of said connection information output device.

8. (Withdrawn) A connection verifiable information processing apparatus according to claim 6, wherein said identifier contains manufacturer information relating to the manufacturing of said connection information output device.

9. (Withdrawn) A connection verifiable information processing apparatus according to claim 6, wherein said identifier contains manufacturing data information indicating the manufacturing date of said connection information output device.

10. (Withdrawn) A connection verifiable information processing apparatus according to claims 2 or 3, wherein the result of the judgment made by said judging means and all or part of the response information converted into said first format are input to display means provided to display response information for said first transmit request output by said first transmit request means, said response information being described following said first format, and are used and displayed.

11. (Withdrawn) A connection verifiable information processing apparatus according to claim 10, wherein when said display means displays the response information converted into said first format by said converting means, the identifier of said connection information output device is used.

12. (Withdrawn) A connection verifiable information processing method comprising:

a first transmit request step of outputting a first transmit request to request an output of connection information;

an information processing step of processing at least response information for said first transmit request output in at least said first transmit request step, said response information being described following a first format;

a second transmit request step of outputting a second transmit request to request an output of connection information;

a response information receiving step of receiving response information described following a second format that a connection information output device outputs in response to said second transmit request output in said second transmit

request step, while remaining unresponsive to said first transmit request output in said first transmit request step; and

converting step of converting the response information described following said second format received in said response information receiving step into response information described following said first format that can be processed in said information processing step, and wherein:

said information processing step processes not only the response information described following said first format returned in response to said first transmit request output in said first transmit request step, but also the response information described following said first format into which the response information described following said second format has been converted in said converting step.

13. (Withdrawn) A program recording medium having a program recorded thereon for enabling a computer to implement functions of all or part of the constituent means of the connection verifiable information processing apparatus described in any one of claims 2 to 3.

14. (Withdrawn) A recording apparatus for recording a digital video/audio encoded signal of a prescribed format and data other than said digital video/audio encoded signal on a recording medium in units of prescribed recording packets, comprising:

input data discriminating means of discriminating an input signal to determine whether said input signal is said digital video/audio encoded signal or data other than said digital video/audio encoded signal;

first error correction coding means of applying first error correction coding to said digital video/audio encoded signal when said digital video/audio encoded signal is input;

second error correction coding means of applying second error correction coding to input data when said data other than said digital video/audio encoded signal is input, and for generating parity; and

recording means of recording (1) said digital video/audio encoded signal and (2) said data and said parity, and wherein:

when data other than said digital video/audio encoded signal is input, said data is processed with said first error correction coding in said first error correction coding means after being processed with said second error correction coding in said second error correction coding means.

15. (Withdrawn) A recording apparatus for recording a digital video/audio encoded signal of a prescribed format and data other than said digital video/audio encoded signal on a recording medium in units of prescribed recording packets, comprising:

input data discriminating means of discriminating an input signal to determine whether said input signal is said digital video/audio encoded signal or data other than said digital video/audio encoded signal;

first error correction coding means of applying first error correction coding to said video/audio encoded signal when said digital video/audio encoded signal is input;

third error correction coding means of applying, instead of said first error correction coding, more powerful third error correction coding to input data when said input data is data other than said digital video/audio encoded signal, and for generating parity; and

recording means of recording (1) said digital video/audio encoded signal and (2) said data and said parity.

16. (Withdrawn) A recording apparatus according to claim 14, wherein said recording apparatus is based on a format in which, in said digital video/audio encoded signal, a code word representing a DC component of each of small blocks constituting a frame is located in a fixed position within said recording packet, and wherein

when data other than said digital video/audio encoded signal is input, (1) an end-of-block code word is placed immediately following the code word of said DC component said end-of-block being indicating that the encoded data of said small block does not exist in an area lying after the position of said end-of-block in an area to which encoded data of said each small block is assigned, and (2) in the area to which the encoded data of said small block is assigned, the area lying after said end-of-block is set as a general-purpose data recording area, and said data and said parity are placed in said general-purpose data recording area.

17. (Withdrawn) A recording apparatus according to claim 16, wherein said recording apparatus is based on a format in which, in said digital video/audio encoded signal, a quantized value representing a DC component of each of said small blocks constituting said frame, class information defining a quantization method for said each small block, and motion information which is information relating to motion within said each block relative to a previous frame, are located in fixed positions within said recording packet, and wherein

when data other than said digital video/audio encoded signal is input, at least one area, selected from among an area where said class information is placed, an area where said motion information is placed, and an area where a low-order digit of the quantized value of said DC component is placed, is also used as said general-purpose data area.

18. (Withdrawn) A recording apparatus according to claim 16, wherein said recording means records a first recording packet, where said data is placed, and a second recording packet, where said parity is placed, in said general-purpose data area.

19. (Withdrawn) A recording apparatus according to claim 18, wherein said recording means assigns a predetermined area to said second recording packet on a track by track basis.

20. (Withdrawn) A recording apparatus according to claim 18, wherein said recording means places said second recording packet in a predetermined track of a plurality of tracks treated as a unit.

21. (Withdrawn) A recording apparatus according to claim 18, wherein said recording means sets a recording packet where a video encoded signal is placed as said first recording packet and a recording packet where an audio encoded signal is placed as said second recording packet.

22. (Withdrawn) A recording apparatus according to any one of claims 14 to 17, wherein said parity information includes at least one of information concerning use/non-use of error correction coding, information concerning the error correction code used, and information concerning the recorded location of said second recording packet, and is recorded in a predetermined position on said recording medium.

23. (Withdrawn) A recording system for recording a digital video/audio encoded signal of a prescribed format and data other than said digital video/audio encoded signal on a recording medium in units of prescribed recording packets, comprising:

first error correction coding means of applying first error correction coding to said video/audio encoded signal when said video/audio encoded signal is input;

second error correction coding means of applying second error correction coding to input data when said data other than said video/audio encoded signal is input, and for generating parity; and

recording means of recording (1) said video/audio encoded signal and (2) said data and said parity, and wherein:

when data other than said video/audio encoded signal is input, said data is processed with said first error correction coding in said first error correction coding means after being processed with said second error correction coding in said second error correction coding means.

24. (Withdrawn) A recording system for recording a digital video/audio encoded signal of a prescribed format and data other than said digital video/audio encoded signal on a recording medium in units of prescribed recording packets, comprising:

third error correction coding means of applying first error correction coding to said video/audio encoded signal when said digital video/audio encoded signal is

input, and then recording said error correction coded signal on said recording medium, wherein

when data other than said video/audio encoded signal is input, said third error correction coding means applies, instead of said first error correction coding, more powerful third error correction coding to said data and generates parity; and

recording means of recording (1) said video/audio encoded signal and (2) said data and said parity.

25. (Withdrawn) A recording system according to claims 23 or 24, further comprising:

a recording apparatus; and

a computer, and wherein:

said first error correction coding is performed at the recording apparatus side, said second or said third error correction coding means performs error correction coding at the computer side, and data processed by said computer is transferred to said recording apparatus for processing therein.

26. (Withdrawn) A recording method for recording a digital video/audio encoded signal of a prescribed format and data other than said digital video/audio encoded signal on a recording medium in units of prescribed recording packets, wherein

when said video/audio encoded signal is input, said video/audio encoded signal is recorded on said recording medium after applying first error correction coding, and

when data other than said video/audio encoded signal is input, said data is recorded on said recording medium after applying second error correction coding together with said first error correction coding and generating parity.

27. (Withdrawn) A recording method for recording a digital video/audio encoded signal of a prescribed format and data other than said digital video/audio encoded signal on a recording medium in units of prescribed recording packets, wherein

when said video/audio encoded signal is input, said video/audio encoded signal is recorded on said recording medium after applying first error correction coding, and

when data other than said video/audio encoded signal is input, said data is recorded on said recording medium after applying, instead of said first error correction coding, more powerful third error correction coding and generating parity.

28. (Withdrawn) A recording method according to claim 26, wherein said recording method is based on a format in which, in said digital video/audio encoded signal, a code word representing a DC component of each of small blocks constituting a frame is located in a fixed position within said recording packet, and wherein

when said data is input, (1) in an area to which encoded data of said each small block is assigned, an end-of-block code word is placed immediately following the code word of said DC component, said end-of-block code being indicating that the encoded data of said small block is truncated at the position of said end-of-block, and (2) in the area to which the encoded data of said small block is assigned, a portion lying after said end-of-block is set as a general-purpose data recording area, and said data and said parity are placed and recorded in said general-purpose data recording area.

29. (Withdrawn) A recording method according to claim 28, wherein said recording method is based on a format in which, in said digital video/audio encoded signal, a quantized value representing a DC component of each of said small blocks constituting said frame, class information defining a quantization method for said each small block, and motion information which is information relating to motion within said each block relative to a previous frame, are located in fixed positions within said recording packet, and wherein

when data other than said digital video/audio encoded signal is input, at least one area, selected from among an area where said class information is placed, an area where said motion information is placed, and an area where a low-order digit of the quantized value of said DC component is placed, is also used as said general-purpose data area.

30. (Withdrawn) A recording method according to claim 28 or 29, wherein said general-purpose data area is divided into a first transmission packet where said data is placed and a second transmission packet where said parity is placed.

31. (Withdrawn) A program recording medium having a program recorded thereon for enabling a computer to implement functions of all or part of the constituent elements of the recording apparatus, recording system, or recording method described in any one of claims 14-21, 23-29.

32. (Currently Amended) A method of acquiring correspondence between a node and a terminal device, which uses a system comprising a computer connected to a network and a plurality of terminal devices connected to said network, wherein

when said computer sends a command for ~~driving-operating~~ or stopping an ~~operation~~ driving of said terminal device into said network, said computer sends out said command with an automatically assigned node number while sequentially changing an ~~automatically assigned the~~ node number to a number other than the a node number of said computer, and

said terminal device that received said command starts ~~driving-the operating~~ or stops the operation-driving.

33. (Currently Amended) A method of acquiring correspondence between a node and a terminal device according to claim 32, wherein

said ~~driving-operating~~ or said stopping of the ~~driving-operation~~ is monitored,

correspondence between the node number sent out together with said command and a timing of said ~~driving-operating~~ or said stopping of the ~~driving operation~~ based on the timing of the command thus sent out is recognized, and

the correspondence between ~~said-each a plurality of~~ node numbers and said ~~each-plurality of~~ terminal devices is acquired from the ~~result of~~ said recognition.

34. (Currently Amended) A method of acquiring correspondence between a node and a terminal device according to claim 32, wherein

said ~~driving-operating~~ or said stopping of the ~~driving-operation~~ is monitored,

correspondence between the node number sent out together with said command and a timing of said ~~driving-operating~~ or said stopping of the ~~driving operation~~ based on the timing of the command thus sent out is recognized, and

the terminal device corresponding to ~~the~~ a desired node number is sought from ~~the result of~~ said recognition.

35. (Currently Amended) A method of acquiring correspondence between a node and a terminal device according to any one of claims 32 to 34, wherein

said terminal device includes illuminating means, and

said ~~driving-operating~~ or said stopping of the ~~driving operation~~, respectively, means turning on or turning off said illuminating means.

36. (Currently Amended) A method of acquiring correspondence between a node and a terminal device according to claim 32, wherein

said ~~driving means that~~ command is for said terminal device ~~supplies to~~ supply said computer with identifying information with which said terminal device can be identified uniquely,

correspondence between ~~the~~ a timing of ~~a~~ the command for supplying said identifying information and the node number of said command sent out at said timing is recognized, and

the correspondence between ~~said each~~ a plurality of node numbers and said ~~each~~ plurality of terminal devices is acquired from ~~the result of~~ said recognition.

37. (Currently Amended) A method of acquiring correspondence between a node and a terminal device according to claim 32, wherein

said ~~driving means that~~ command is for said terminal device ~~supplies to~~ supply said computer with identifying information with which said terminal device can be identified uniquely,

correspondence between ~~the~~a timing of ~~a~~the command for supplying said identifying information and the node number of said command sent out at said timing is recognized, and

the terminal device corresponding to ~~the~~a desired node number is located based on ~~the result of~~ said recognition.

38. (Currently Amended) A method of acquiring correspondence between a node and a terminal device according to claim 36, wherein

when said network is first reset, said computer creates a list carrying said identifying information ~~and/or~~ a name designating said terminal device in corresponding relationship to said automatically assigned node number on the basis of said identifying information received from said terminal device, and each time said network is reset thereafter, said computer updates said list, and the correspondence between said plurality of each node numbers and said each ~~plurality of~~ terminal devices is acquired by referencing said list.

39. (Original) A method of acquiring correspondence between a node and a terminal device according to claim 38, wherein said identifying information is a node unique ID.

40. (Currently Amended) A method of acquiring correspondence between a node and a terminal device, which uses a system comprising a computer connected to a network and a plurality of terminal devices connected to said network, wherein

when said computer sends data to be played back on said terminal device into said network, said computer sends out said data with an automatically assigned node number while sequentially changing ~~an automatically assigned~~the node number to another number other than ~~the~~a node number of said computer, ~~and~~

said data is played back on said terminal device that received said command.

41. (Currently Amended) A method of acquiring correspondence between a node and a terminal device according to claim 40, wherein

said playback is monitored,

correspondence between the node number sent out together with said data and ~~the~~ a timing for playing back said data is recognized, and

the correspondence between said ~~each~~ plurality of node numbers and said ~~each~~ plurality of terminal devices is acquired from the result of said recognition.

42. (Currently Amended) A method of acquiring correspondence between a node and a terminal device according to claim 40, wherein

said playback is monitored,

correspondence between the node number sent out together with said data and a timing for playing back said data is recognized, and

the terminal device corresponding to ~~the~~ a desired node number is sought from ~~the result of~~ said recognition.

43. (Original) A method of acquiring correspondence between a node and a terminal device according to any one of claims 40 to 42, wherein a channel used by said data is assigned in such a manner as to be able to uniquely identify said node number.

44. (Original) A method of acquiring correspondence between a node and a terminal device according to claim 36 or 37, wherein said identifying information is a numeric value.

45. (Currently Amended) A method of acquiring correspondence between a node and a terminal device according to any one of claims 32 to 34, wherein

said terminal device includes display means, and

said ~~driving means~~ command is for displaying the node number of said terminal device on said display means.

46. (Previously Presented) A method of acquiring correspondence between a node and a terminal device according to any one of claims 32-34, 36-42, wherein said terminal device is a home VCR.

47. (Currently Amended) A method of acquiring correspondence between a node and a terminal device according to any one of claims 32-34, 36-42, wherein each of said node numbers is a device number ~~is used instead of said node number~~.

48. (Previously Presented) A method of acquiring correspondence between a node and a terminal device according to any one of claims 32-34, 36-42, wherein said network is an IEEE 1394 bus.

49. (Previously Presented) A program recording medium having a program recorded thereon for enabling a computer to implement all or part of the functions of the method of acquiring correspondence between a node and a terminal device described in any one of claims 32-34, 36-42.

50. (Currently Amended) A computer which uses a system comprising said computer connected to a network and a plurality of terminal devices connected to said network, said computer comprising:

input means of inputting one of an automatically assigned node number and a device number, other than ~~the a~~ node number of said computer, to a terminal device having (1) a second interface which receives a command sent out from said computer via said network and (2) control means for performing control so as to execute said command received via said second interface; and

a first interface which sends out a command for ~~driving-operating~~ or stopping ~~a-driving an operation~~ of said terminal device into said network, while sequentially changing said one of said node number and said device number input by said input means, and wherein:

said command with said one of said node number and said device number is sent to said terminal device via said network.

51. (Currently Amended) A computer according to claim 50, wherein

said ~~driving-operating~~ or said stopping of the ~~driving-operation~~ is monitored,
correspondence between said one of the node number and the device number
sent out together with said command and a timing of said driving or said stopping of
the driving based on the timing of the command thus sent out is recognized, and
the correspondence between ~~said each a plurality of~~ node numbers or device
numbers and ~~said each-plurality of~~ terminal devices is acquired from ~~the result of~~
said recognition.

52. (Currently Amended) A computer which uses a system comprising said
computer connected to a network and a plurality of terminal devices connected to
said network, said computer comprising:

a first interface which, when said network is reset, sends out a command for
requesting a node unique ID to said terminal devices into said network, while
sequentially changing one of a node number and a device number as a destination ID
or by appending to said command a description as a destination ID indicating
delivery to all connected devices, and said terminal device comprising (1) a second
interface which receives said command sent out from said computer via said
network, (2) control means for performing control so as to execute said command
received via said second interface, and (3) a second memory which is referenced by
said second interface and which stores said node unique ID unique to said device to
be transmitted to said computer;

a first memory for storing a list carrying said node unique ID ~~and/or~~ a name
designating said terminal device in corresponding relationship to said node number;
and

converting means for creating said list and storing the same in said first
memory at the time of the first reset, and for updating said list for each reset
thereafter, and wherein:

when said first interface sends the command for requesting said node unique
ID into said network,

said second interface returns said node unique ID to said first interface via said network in response to said command,

said first interface receives said node unique ID sent out from said second interface via said network,

said converting means creates or updates said list by using said node unique ID received from said each terminal device, and

correspondence between each node and each terminal device is obtained by referencing said list.

53. (Cancelled)

54. (Previously Presented) A computer according to any one of claims 50 to 52, wherein said network is an IEEE 1394 bus.

55. (Previously Presented) A program recording medium having a program recorded thereon for enabling a computer to implement all or part of the functions of the computer described in any one of claims 50 to 52.

56. (Currently Amended) A terminal device which uses a system comprising a computer connected to a network and a plurality of said terminal devices connected to said network, said terminal device comprising:

a second interface which receives a command sent out via said network from said computer having (1) input means for inputting an automatically assigned node number other than the node number of said computer and (2) a first interface which sends out a command for ~~driving-operating~~ or stopping the ~~driving~~ an operation of said terminal device into said network, while sequentially changing said node number input by said input means; and

control means for performing control so as to execute said command received via said second interface, and wherein:

said command with said node number is sent to said terminal device via said network.

57. (Currently Amended) A terminal device according to claim 56, wherein

said ~~driving-operating~~ or said stopping of the ~~driving-operation~~ is monitored,

correspondence between the node number sent out together with said command and a timing of said ~~driving-operating~~ or said stopping of the ~~driving-operation~~ based on the timing of the command thus sent out is recognized, and

the correspondence between said ~~each~~ plurality of node numbers and said ~~each-plurality of~~ terminal devices is acquired from the ~~result of~~ said recognition.

58. (Currently Amended) A terminal apparatus according to claim 56 or 57, further comprising illuminating means, and wherein

said ~~driving-operating~~ or said stopping of the ~~driving-operation~~, respectively, ~~means turning~~ turns on or turning ~~turns~~ off said illuminating means.

59. (Currently Amended) A terminal device which uses a system comprising a computer connected to a network and a plurality of said terminal devices connected to said network, said terminal device comprising:

a second interface which, when said network is reset, receives a command sent out via said network from said computer having (1) a first interface which sends out into said network a command for requesting a node unique ID to said terminal device, while sequentially changing a node number as a destination ID or by appending to said command a description as a destination ID indicating delivery to all connected devices, (2) a first memory for storing a list carrying said node unique ID ~~and/or~~ a name designating said terminal device in corresponding relationship to said node number, and (3) converting means for creating said list and storing the same in said first memory at the time of ~~the~~ a first reset, and for updating said list for each reset thereafter;

control means for performing control so as to execute said command received via said second interface; and

a second memory which is referenced by said second interface and which stores its own node unique ID to be transmitted to said computer, and wherein:

when said first interface sends the command for requesting said node unique ID into said network,

said second interface returns said node unique ID to said first interface via said network in response to said command,

said first interface receives said node unique ID sent out from said second interface via said network,

said converting means creates or updates said list by using said node unique ID received from each terminal device, and

correspondence between said each node and said each terminal device is obtained by referencing said list.

60. (Original) A terminal device which uses a system comprising a computer connected to a network and a plurality of said terminal devices connected to said network, said terminal device comprising:

a second interface which receives a command sent out via said network from said computer having a first interface which sends out into said network a command for requesting said terminal device for transmission of identifying information capable of uniquely identifying said terminal device, while sequentially changing a node number as a destination ID or by appending to said command a description as a destination ID indicating delivery to all connected devices;

control means for performing control so as to execute said command received via said second interface;

a second memory which is referenced by said second interface and which stores said identifying information to be transmitted to said computer, and

input means for inputting said identifying information, and wherein:

when said first interface sends the command for requesting said identifying information into said network,

said second interface returns said identifying information to said first interface via said network in response to said command, and

said first interface receives said identifying information sent out from said second interface via said network, and thereby obtains correspondence between said each node and said each terminal device.

61. (Original) A terminal device according to claim 60, wherein said identifying information is a numeric value.

62. (Currently Amended) A terminal device according to claim 56 or 57, further comprising display means, and wherein

| ~~said driving means~~ command is for said terminal device to display displaying the node number of said terminal device on said display means.

63. (Previously Presented) A terminal device according to any one of claims 56, 57, 59-61, wherein said terminal device is a home VCR.

| 64. (Currently Amended) A terminal device according to any one of claims 56, 57, 59-61, wherein each of said node numbers is a device number is used instead of said node number.

65. (Previously Presented) A terminal device according to any one of claims 56, 57, 59-61, wherein said network is an IEEE 1394 bus.

66. (Previously Presented) A program recording medium having a program recorded thereon for enabling a computer to implement all or part of the functions of the terminal device described in any one of claims 56, 57, 59-61.

67. (Currently Amended) A method of acquiring correspondence between a node and a terminal device, which uses a system comprising a computer connected to a network and a plurality of terminal devices connected to said network, wherein

Application No.: 09/744,885
Amendment Dated: May 30, 2006
Reply to Office Action of: February 28, 2006

MTS-3234US

when said computer sends into said network a command for requesting transmission of a node unique ID unique to said terminal device, said computer sends out said command by appending to said command a description as a destination ID indicating delivery to all connected devices, and

said terminal device that received said command starts ~~driving~~
operating or stops ~~driving~~operating.